# **RAW SEQUENCE LISTING**

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number:	09/641.808
Source:	IFW/6
Date Processed by STIC:	1/21/05

# ENTERED



### IFW16

RAW SEQUENCE LISTING DATE: 01/21/2005
PATENT APPLICATION: US/09/641,808 TIME: 15:36:35

Input Set : A:\45312201.app

```
3 <110> APPLICANT: BELFORT, MARLENE
       BELFORT, GEORGES
        DERBYSHIRE, VICKY
 5
        WOOD, DAVID
 6
        WU, WEI
 7
 9 <120> TITLE OF INVENTION: GENETIC SYSTEM AND SELF-CLEAVING INTEINS DERIVED
10
        THEREFROM, BIOSEPARATIONS AND PROTEIN PURIFICATION
11
        EMPLOYING SAME, AND METHODS FOR DETERMINING CRITICAL,
        GENERALIZABLE AMINO ACID RESIDUES FOR VARYING
12
14 <130> FILE REFERENCE: 454311-2201.1
16 <140> CURRENT APPLICATION NUMBER: 09/641,808
17 <141> CURRENT FILING DATE: 2000-08-17
19 <150> PRIOR APPLICATION NUMBER: 60/149,257
20 <151> PRIOR FILING DATE: 1999-08-17
22 <160> NUMBER OF SEQ ID NOS: 26
24 <170> SOFTWARE: PatentIn Ver. 3.3
26 <210> SEQ ID NO: 1
27 <211> LENGTH: 7
28 <212> TYPE: PRT
29 <213> ORGANISM: Artificial Sequence
31 <220> FEATURE:
32 <223> OTHER INFORMATION: Description of Artificial Sequence: Illustrative
        peptide
33
35 <400> SEQUENCE: 1
36 Cys Gly Glu Gln Pro Thr Gly
37
   1
40 <210> SEQ ID NO: 2
41 <211> LENGTH: 5
42 <212> TYPE: PRT
43 <213> ORGANISM: Artificial Sequence
45 <220> FEATURE:
46 <223> OTHER INFORMATION: Description of Artificial Sequence: Illustrative
        peptide
49 <400> SEQUENCE: 2
50 Ser Ile Glu Gln Asp
51 1
54 <210> SEQ ID NO: 3
55 <211> LENGTH: 5
56 <212> TYPE: PRT
57 <213> ORGANISM: Artificial Sequence
59 <220> FEATURE:
60 <223> OTHER INFORMATION: Description of Artificial Sequence: Illustrative
61
        peptide
```

DATE: 01/21/2005

TIME: 15:36:35

```
Input Set : A:\45312201.app
                Output Set: N:\CRF4\01212005\I641808.raw
63 <400> SEQUENCE: 3
64 Cys Arg Ala Met Gly
65 1
68 <210> SEQ ID NO: 4
69 <211> LENGTH: 5
70 <212> TYPE: PRT
71 <213> ORGANISM: Artificial Sequence
73 <220> FEATURE:
74 <223> OTHER INFORMATION: Description of Artificial Sequence: Illustrative
        peptide
77 <400> SEQUENCE: 4
78 Met Ile Glu Gln Asp
79
   1
82 <210> SEQ ID NO: 5
83 <211> LENGTH: 19
84 <212> TYPE: PRT
85 <213> ORGANISM: Foot-and-mouth disease virus
87 <400> SEQUENCE: 5
88 Leu Leu Asn Phe Asp Leu Leu Lys Leu Ala Gly Asp Val Glu Ser Asn
89
     1
91 Pro Gly Pro
95 <210> SEQ ID NO: 6
96 <211> LENGTH: 8
97 <212> TYPE: DNA
98 <213> ORGANISM: Artificial Sequence
100 <220> FEATURE:
101 <223> OTHER INFORMATION: Description of Artificial Sequence: Illustrative
102
          polynucleotide sequernce
104 <400> SEQUENCE: 6
105 agtcagtc
                                                                        8
108 <210> SEQ ID NO: 7
109 <211> LENGTH: 8
110 <212> TYPE: DNA
111 <213> ORGANISM: Artificial Sequence
113 <220> FEATURE:
114 <223> OTHER INFORMATION: Description of Artificial Sequence: Illustrative
         polynucleotide sequernce
115
117 <400> SEQUENCE: 7
118 aatcaatc
                                                                        8
121 <210> SEQ ID NO: 8
122 <211> LENGTH: 19
123 <212> TYPE: PRT
124 <213> ORGANISM: Foot-and-mouth disease virus
126 <400> SEQUENCE: 8
127 Leu Leu Asn Phe Asp Leu Leu Lys Leu Ala Gly Asp Val Glu Ser Asn
      1
                                        - 10
130 Pro Gly Pro
134 <210> SEQ ID NO: 9
135 <211> LENGTH: 9
```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/641,808

# RAW SEQUENCE LISTING DATE: 01/21/2005 PATENT APPLICATION: US/09/641,808 TIME: 15:36:35

Input Set : A:\45312201.app

```
136 <212> TYPE: PRT
137 <213> ORGANISM: Saccharomyces cerevisiae
139 <400> SEQUENCE: 9
140 Phe Thr Cys Asn Ala Thr His Glu Leu
141 1
144 <210> SEQ ID NO: 10
145 <211> LENGTH: 9
146 <212> TYPE: PRT
147 <213> ORGANISM: Mycobacterium leprae
149 <400> SEQUENCE: 10
150 Phe Ala Ala Thr Pro Asn His Leu Ile
151 1
154 <210> SEQ ID NO: 11
155 <211> LENGTH: 9
156 <212> TYPE: PRT
157 <213> ORGANISM: Mycobacterium xenopi
159 <400> SEQUENCE: 11
160 Val Thr Gly Thr Ala Asn His Pro Leu
161 1
164 <210> SEQ ID NO: 12
165 <211> LENGTH: 9
166 <212> TYPE: PRT
167 <213> ORGANISM: Pyrococcus sp.
169 <400> SEQUENCE: 12
170 Ile Thr Ile Thr Glu Gly His Ser Leu
171
    1
174 <210> SEQ ID NO: 13
175 <211> LENGTH: 9
176 <212> TYPE: PRT
177 <213> ORGANISM: Porphyra purpurea
179 <400> SEQUENCE: 13
180 Leu Glu Leu Thr Ser Asn His Lys Ile
184 <210> SEQ ID NO: 14
185 <211> LENGTH: 9
186 <212> TYPE: PRT
187 <213> ORGANISM: Mycobacterium tuberculosis
189 <400> SEQUENCE: 14
190 Val Trp Ala Thr Pro Asp His Lys Val
191
    1
194 <210> SEQ ID NO: 15
195 <211> LENGTH: 9
196 <212> TYPE: PRT
197 <213> ORGANISM: Caenorhabditis elegans
199 <400> SEQUENCE: 15
200 Leu Arg Ile Thr Ser Arg His Phe Met
201 1
                      5
204 <210> SEQ ID NO: 16
205 <211> LENGTH: 9
```

# RAW SEQUENCE LISTING DATE: 01/21/2005 PATENT APPLICATION: US/09/641,808 TIME: 15:36:35

Input Set : A:\45312201.app

```
206 <212> TYPE: PRT
207 <213> ORGANISM: Drosophila melanogaster
209 <400> SEQUENCE: 16
210 Leu Thr Val Thr Pro Ala His Leu Val
211
      1
214 <210> SEQ ID NO: 17
215 <211> LENGTH: 9
216 <212> TYPE: PRT
217 <213> ORGANISM: Xenopus laevis
219 <400> SEQUENCE: 17
220 Ile Arg Leu Thr Ala Ala His Leu Leu
224 <210> SEQ ID NO: 18
225 <211> LENGTH: 19
226 <212> TYPE: PRT
227 <213> ORGANISM: Saccharomyces cerevisiae
229 <400> SEQUENCE: 18
230 Asp Tyr Tyr Gly Ile Thr Leu Ser Asp Asp Ser Asp His Gln Phe Leu
231
      1
                      5
                                          10
233 Leu Ala Asn
237 <210> SEQ ID NO: 19
238 <211> LENGTH: 18
239 <212> TYPE: PRT
240 <213> ORGANISM: Mycobacterium leprae
242 <400> SEQUENCE: 19
243 Ser Met Asn Arg Phe Asp Ile Glu Val Glu Gly Asn His Asn Tyr Phe
     1
246 Val Asp
250 <210> SEQ ID NO: 20
251 <211> LENGTH: 19
252 <212> TYPE: PRT
253 <213> ORGANISM: Mycobacterium xenopi
255 <400> SEQUENCE: 20
256 Val Gln Pro Val Tyr Ser Leu Arg Val Asp Thr Ala Asp His Ala Phe
257
    1
                                         10
259 Ile Thr Asn
263 <210> SEO ID NO: 21
264 <211> LENGTH: 18
265 <212> TYPE: PRT
266 <213> ORGANISM: Pyrococcus sp.
268 <400> SEQUENCE: 21
269 Asp Gly Tyr Val Tyr Asp Leu Ser Val Asp Glu Asp Glu Asn Phe Leu
270
    1
                                         10
272 Ala Gly
276 <210> SEQ ID NO: 22
277 <211> LENGTH: 18
278 <212> TYPE: PRT
279 <213> ORGANISM: Porphyra purpurea
281 <400> SEQUENCE: 22
```

RAW SEQUENCE LISTING DATE: 01/21/2005
PATENT APPLICATION: US/09/641,808 TIME: 15:36:35

Input Set : A:\45312201.app

Output Set: N:\CRF4\01212005\1641808.raw

282 Phe Gln Asn Val Phe Asp Phe Ala Ala Asn Pro Ile Pro Asn Phe Ile 283 1 5 285 Ala Asn 289 <210> SEQ ID NO: 23 290 <211> LENGTH: 18 291 <212> TYPE: PRT 292 <213> ORGANISM: Mycobacterium tuberculosis 294 <400> SEQUENCE: 23 295 Arg Ala Arg Thr Phe Asp Leu Glu Val Glu Leu His Thr Leu Val 298 Ala Glu 302 <210> SEQ ID NO: 24 303 <211> LENGTH: 16 304 <212> TYPE: PRT 305 <213> ORGANISM: Caenorhabditis elegans 307 <400> SEQUENCE: 24 308 Thr Gly Ile Tyr Ser Pro Leu Thr Asn Asn Gly Arg Ile Ile Val Asn 309 5 10 1 312 <210> SEQ ID NO: 25 313 <211> LENGTH: 16 314 <212> TYPE: PRT 315 <213> ORGANISM: Drosophila melanogaster 317 <400> SEQUENCE: 25 318 Lys Gly Val Val Ala Pro Leu Thr Arg Glu Gly Thr Ile Val Val Asn 319 322 <210> SEQ ID NO: 26 323 <211> LENGTH: 16 324 <212> TYPE: PRT 325 <213> ORGANISM: Xenopus laevis 327 <400> SEQUENCE: 26 328 Thr Gly Ala Tyr Ala Pro Leu Thr Ala His Gly Thr Val Val Ile Asp 329 5

VERIFICATION SUMMARY
PATENT APPLICATION: US/09/641,808

DATE: 01/21/2005 TIME: 15:36:36

Input Set : A:\45312201.app